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10/510,535	10/07/2004	Robert Vincent Krakora	Pu020105	2328
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EXAMINER				
BAIG, SAHAR A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/510,535

**Applicant(s)**

KRAKORA ET AL.

**Examiner**

SAHAR A. BAIG

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-6, 8-13, 15-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Mao US Patent No. 6,728,965 in view of Kim US Patent Publication No. 2001/0033342.

Regarding Claim 1, 7, and 14, Mao discloses a method for reducing channel change times, comprising: receiving a channel change command [**Col. 2 lines 37-40**]; initiating caching of an incoming data stream associated with a newly selected channel in response to the channel change command [**Col. 2, lines 32-36**], the incoming data stream including information [**Col. 6, lines 52-55**]; finding the information included within the incoming data stream; and transferring the cached data stream for decoding in response to the information [**Col. 2 lines 32-36**].

However, Mao fails to explicitly teach the limitation wherein the incoming data stream including program specific information. In an analogous art, Kim discloses a system for local video distribution wherein the arriving signal contains a collection of information streams representing various broadcast programs. Typical steps which may be used to get the Program Specific Information (PSI) from the Transport Stream Packets is to first find the Program Associated Table (PAT) which contains the program numbers and the Packet Identification (PID) of the associated Program Map Tables (PMT) **[0043]**.

Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Mao and Kim to devise a system capable of reducing channel switching latency.

Regarding Claim 21 and 23, Mao discloses a method for reducing channel change times, comprising: receiving a channel change command **[Col. 2 lines 37-40]**; initiating caching of an incoming data stream associated with a newly selected channel in response to the-channel change command, the incoming data stream including header information used to start decoding video data included in the data stream; determining header information in the data stream; and decoding the cached data stream in response to the header information **[Col. 7 lines 8-25]**.

Regarding Claim 22 and 24, Mao discloses that the header information corresponds to sequence, headers according to the MPEG standards **[Col. 7 lines 41-43]**.

4. Claims 2-6, 8-13, 15-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Mao US Patent No. 6,728,965, in view of Kim US Patent Publication No. 2001/0033342, in view of Shintani US Patent No. 6,490,001.

Regarding Claim 2, 8, and 15, Mao & Kim disclose all of the claimed limitations except the use of program association table data in an analogous art, Shintani discloses a method wherein the program specific information comprises program association table data and program map table data **Figure 1 unit 332**.

Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Mao, Kim and Shintani to provide a method arranged to reduce the delay time of TV broadcast.

Regarding Claim 3, 4, 9, 10, 16, and 17 Shintani discloses a method wherein the step of finding the program specific information includes filtering data from the cached data stream **Fig 2 unit 223** *[The channel equalizer 223 functions mainly as a ghost canceller, and has a multi-tap digital filter]*.

Regarding Claim 5, 11, and 18, Shintani discloses a method comprised of finding sequence header data within the cached data stream **Figure 4 S103**.

Regarding Claim 6, 12, and 19, Shintani discloses a method wherein the step of finding the program specific information comprises **Figure 8**: finding program association table data within the incoming data stream **S306**; finding program map table data using the program association table data **S307**; and finding at least one of video program identification data and audio program identification data using the program map table data [**S308, the control section 31 changes each of the switch circuits 41 and 42 to the input terminal DTV side**].

Regarding Claim 13 and 20, Shintani discloses an apparatus for receiving a digital television broadcast such as a digital ground wave broadcast or a digital cable broadcast [**Col. 1 lines 8-14**]. Although Shintani fails to teach a set top box, it would have been obvious to one of ordinary skill to use one since they are well known and to replace the receiver would have been obvious to allow for a dedicated piece of hardware that will allow a cable provider the ability to provide secure communications with clients.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-3005. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/  
Supervisory Patent Examiner, Art  
Unit 2623

SB